

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

**JPS Elastomerics - Stevens Urethane
412 Main Street - Route 10
Easthampton, MA 01027**

is authorized to discharge from the facility located at

**Hampshire Plant
412 Main Street – Route 10
Easthampton, MA 01027**

to receiving water named: wetland to Wilton Brook (Connecticut River Basin MA-34)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective 60 days from the date of signature.

This permit and the authorization to discharge expire at midnight, five years from the effective date.

This permit supersedes the permit issued on September 30, 1986.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements; Attachment A; and 35 pages in Part II including General Conditions and Definitions.

Signed this 7th day of September, 2004

Linda M. Murphy
Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director, Division of Watershed Management
Bureau of Resource Protection
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge **contact and non contact cooling water** from outfall serial number **001**. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitation</u>				<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (gpd)	*****	*****	*****	20,000 gpd	Daily	Estimate
BOD ₅	0.7 kg/day 1.5 lb/day	0.7 kg/day 1.5 lb/day	18 mg/l	*****	1 / Month	Composite ⁷
TSS	0.5 kg/day 1.1 lb/day	0.5 kg/day 1.1 lb/day	13 mg/l	*****	1 / Month	Composite ⁷
Oil & Grease ¹	*****	*****	*****	15 mg/l	1 / Month	Grab
Temperature ¹	*****	*****	83 °F	83 °F	1 / Week	Grab
Total Residual Chlorine ²	*****	*****	0.011 mg/l	0.019 mg/l	1 / Month	Grab
pH ¹	6.5 - 8.3 SU (See Condition I.A.3.b. on Page 5)				1 / Month	Grab
Whole Effluent Toxicity Testing ^{3, 4, 5, 6}	Acute Chronic	LC ₅₀ ≥ 100 % C-NOEC ≥ 100 %			1 Test	Composite ⁷
Trichloroethylene	*****	*****	*****	Report ug/l	1 / Quarter	Composite ⁷
bis (2-ethylhexyl) phthalate	*****	*****	*****	Report ug/l	1 / Year	Composite ⁷
Dissolved Oxygen	*****	*****	*****	Report mg/l	1 / Quarter	Grab

** Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of pipe, prior to discharge to the wetland, on a dry day with no storm water component, under normal operating conditions.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

2. During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge **non-contact cooling water (NCCW) in the event of a mechanical failure of the closed loop NCCW system⁸** from outfall serial number **001**. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitation⁸</u>				<u>Monitoring Requirement⁸</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Discharge Days	*****	*****	*****	Report Number of Discharge Days per Month	Daily When Discharging	Record
Flow (gpd)	*****	*****	Report gpd	30,000 gpd	Daily When Discharging	Calculate
Temperature ¹	*****	*****	*****	83 °F	Daily When Discharging	Grab
Total Residual Chlorine ²	*****	*****	0.011 mg/l	0.019 mg/l	Daily When Discharging	Grab
pH ¹	6.5 - 8.3 SU	(See Condition I.A.3.b. on Page 5)			Daily When Discharging	Grab
Dissolved Oxygen	*****	*****	*****	Report mg/l	1 / Quarter	Grab

** Samples taken in compliance with the monitoring requirements specified above shall be taken prior to blending with the contact cooling

waters, each day when there is a mechanical failure with the existing closed loop system. Also see footnote 8.

Footnotes:

1. Required for State Certification.
2. The minimum level (ML) for total residual chlorine is defined as 20 ug/l. This value is the minimum level for chlorine using EPA approved methods found in the most currently approved version of Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G, or USEPA Manual of Methods of Analysis of Water and Wastewater, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 20 ug/l, compliance/non-compliance will be determined based on the ML. Sample results of 20 ug/l or less shall be reported as zero on the discharge monitoring report.
3. The permittee shall conduct one chronic (and modified acute) toxicity test. The chronic test may be used to calculate the acute LC₅₀ at the 48 hour exposure interval. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected during the second week of September. The test results shall be submitted by the last day of the month following the completion of the test. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Date 2 nd Week in	Submit Results By:	Test Species	Acute Limit LC ₅₀	Chronic Limit C-NOEC
September	October 31 st	<u>Ceriodaphnia dubia</u> (daphnid) <u>Pimephales promelas</u> (fathead minnow)	≥ 100 %	≥ 100 %

4. The LC₅₀ is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
5. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "100 % or greater" limit is defined as a sample which is composed of 100 % effluent. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 1.0.

6. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.
7. A composite sample will consist of at least eight (8) grab samples taken during one working day.
8. Samples taken in compliance with the monitoring requirements specified above shall be taken prior to blending with the contact cooling waters, each day when there is a mechanical failure with the existing closed loop system.

During times of a mechanical failure of the closed loop non-contact cooling water system, the monitoring requirements listed above in Part I.A.2. shall be completed in addition to those requirements listed in Part I.A.1. listed on page 2.

Part I.A.3. Conditions for Outfall 001.

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded as a result of an approved treatment process.
- c. The discharge shall not cause objectionable discoloration of the receiving waters.
- d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
- e. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
- f. The results of sampling for any parameter above its required frequency must also be reported, in accordance with 40 CFR § 122.41(l)(4)(ii).

- g. The rise in temperature in the receiving water due to the discharge shall not exceed 5 degrees Fahrenheit.

Part I.A.4.

This permit shall be modified, or revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- (1) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
- (2) controls any pollutant not limited by this permit.

If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Act.

Part I.A.5.

All existing manufacturing, commercial, mining, and silvi-cultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR 122.42):

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "Notification levels":
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR §122.44(f).
- b. That any activity as occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR §122.44(f).
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

Part I.A.6. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

Part I.A.7. Numerical Effluent Limitations for Toxicants

EPA or DEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfalls listed in Part I.A. of this permit. Discharges of wastewater from any other point sources are not authorized by this permit and shall be reported in accordance with Section D.1.e.(1) of the General Requirements of this permit (Twenty-four hour reporting).

C. MONITORING AND REPORTING

Monitoring results obtained during each calendar **month** shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked **no later than the 15th day of the following month.**

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Western Regional Office
436 Dwight Street
Springfield, MA 01103

In addition, copies of all Discharge Monitoring Reports required by this permit shall also be submitted to the State at following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, MA 01608

D. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.